

# Upper Animas Mining District

**Site Type:** Non NPL (National Priorities List)

**City:** Silverton

**County:** San Juan

**Site Aliases:** Upper Animas Watershed, Upper Cement Creek

**Congressional District:** 3

## Site Description

The Animas River and many of its tributaries are impacted by high concentrations of hazardous substances (heavy metals) from both acid rock/mine drainage at mine sites and from natural sources not impacted by mining.

The watersheds within the volcanic terrain of the San Juan Mountains were the focus of both large- and small-scale mining operations between 1871 and 1991.

Over 300 former mines have been identified in the area. Mining activities significantly increased the exposure of mineralized geologic materials. This contributes to degraded water quality in the UA and its tributaries. Mine drainage from the former mines and mine-related wastes, such waste rock piles, contribute acidic, metal-rich water to the Upper Animas.

The Gold King Mine is the closest mine to the Red and Bonita Mine and is located higher on the mountain.

## Background

EPA and the Colorado Department of Public Health and Environment (CDPHE) conducted a Superfund Site Assessment of the site in the 1990s. This assessment identified the severe impacts to aquatic life in the UA and its tributaries from naturally occurring and mining-related heavy metals. In recognition of the community-based collaborative effort, EPA agreed to postpone adding all or a portion of the site to the Superfund National Priorities List (NPL), as long as progress was being made to improve the water quality of the Animas River.

Until approximately 2005, water quality in the Animas River was improving. However, since 2005, water quality in the Animas River has not improved and, for at least 20 miles below the confluence with Cement Creek, has declined significantly.

Because of this declining water quality in the Animas River, in 2008, EPA's Superfund Site Assessment program began investigations in Upper Cement Creek focused on evaluating whether the Upper Cement Creek area alone would qualify for inclusion on the NPL. This evaluation indicated that the area would qualify, although after receiving additional community input, EPA again postponed efforts to include the area on the NPL. Since that time, EPA has continued and broadened its investigations of conditions at the site in order to understand the major sources of heavy metal contamination in the UA.

## Site Risk

Mining operations have greatly disturbed the land, adding to existing highly mineralized conditions in many areas of the site. Mineralized waste rock exposed to air and water causes acidic conditions to mobilize the release of heavy metals to the surrounding environment. These heavy metals have found their way into the Animas River and its tributaries and have eventually traveled farther downstream.

Media Affected	Contaminants	Source of Contamination
surface water, subsurface water, surface soils and stream sediments	heavy metals – aluminum, lead, zinc, cadmium, copper, iron and manganese	historic mining activities and naturally occurring mineralization

## Cleanup Progress

Numerous mine reclamation and mine waste cleanup projects have been completed in the Upper Animas watershed over the last twenty years. These efforts have included diverting runoff away from and capping mine waste piles, moving mine waste piles away from drainages, consolidating mine waste piles and re-vegetating mine waste piles.

From: <http://www2.epa.gov/region8/upper-animas-mining-district>

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